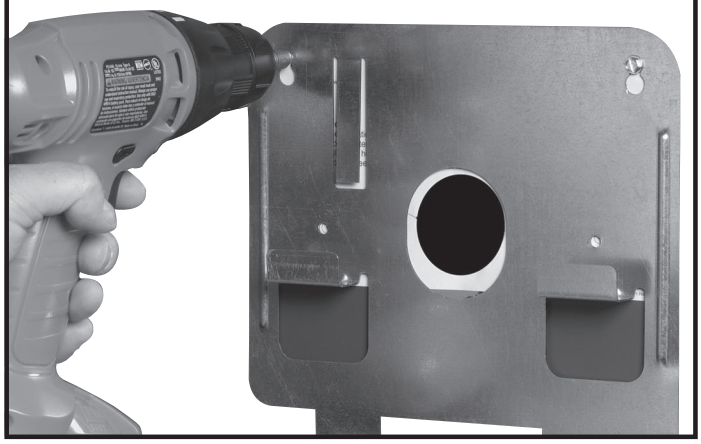
Steam Humidifier

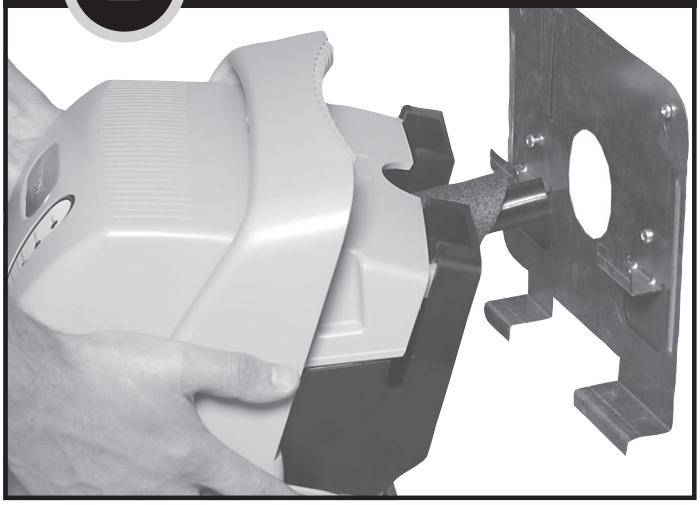
As Easy as 1-2-3-4

PROFESSIONAL INSTALLATION GUIDE

1 Mount

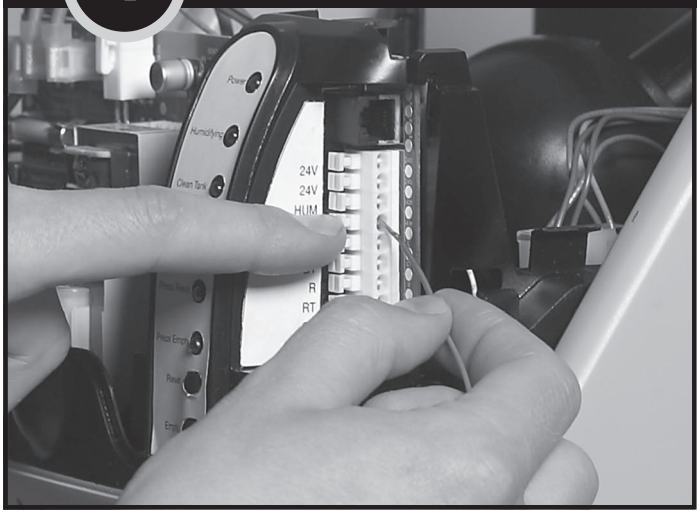


2 Hang



3 Plumb

4 Wire



See inside for detailed instruction and remote mounting options!

69-2307-01

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Need Help?

For assistance with this product please visit **Rheem.com** or **Ruud.com**
or call 479-648-4900.

Read and save these instructions.

INSTALLATION RECOMMENDATIONS

Make your installation accurate and efficient by addressing these commonly asked questions:

Sizing for the Job

1. Selecting the appropriate humidifier for the job is critical:

The table below illustrates the square footage the humidifier can serve.

It is not recommended to install a 6 gallon device in a home larger than 2000 square feet.

Square Feet of Space	500	1000	1500	2000	2500	3000
ARI* Recommended Output Delivery (GPD)	0.1	2.2	4.4	6.5	8.6	11.7
RXIH-AS12A - True 12 Gallons						
RXIH-AS09A - True 9 Gallons						
RXIH-AS06A - True 6 Gallons						

* ARI Guideline F-2007 for maintaining 35% RH in a tight, residential four-person home with 8-ft. ceilings. Outdoor conditions = 20ºF and 70% RH.

Installation Check-out List

- Install the in-line water filter and back-flow prevention valve.
- Check that the main water supply line is open.
- Ensure there are no water leaks/drips at any of the water connections.
- Plug into a circuit with at least enough capacity to power the unit.
- Generate a call for humidity from the control and ensure tank fills and the Humidify light turns on, indicating steam is being generated.
- Test the drain by pressing the EMPTY button until the Clean Tank light begins blinking, indicating a drain cycle has begun.

  NOTE: It may take approximately 10 minutes for the tank to fully flush and drain. TO BYPASS AND DRAIN IMMEDIATELY, Press and hold the EMPTY button again while the Clean Tank light is blinking. This will bypass the flush and immediately drain the tank. TO STOP draining, press the Reset button.
- Mount the provided yellow tank service sticker on the duct/wall near the unit. Ensure the drain hose is secured to prevent inadvertent disconnection. Check that the hose is plumbed to a drain/condensate to prevent water spurting.

INSTALLATION RECOMMENDATIONS

Setting Homeowner Expectations for the humidifier Experience:

It may take up to a week of continuous operation to achieve the humidity set point, depending on weather, size of home, furnishings in the home, insulation, etc.

If using a six (6) gallon unit, the most appropriate setpoint is 30-35% or until there is condensation on the windows, then lower the setpoint. If the home can't achieve the setpoint, the unit may be under-sized (if home is under 2000 sq ft, this can also be due to insulation, windows, arid climate, etc.) or the outdoor temperature may be too low to maintain adequate humidity levels. Rheem recommends waiting for the temperature to moderate closer to 20°F (-6°C).

If this occurs and the selected humidity levels are not achieved, then a larger capacity model may be needed.

For the first week of operation, it is normal to experience a slight plastic odor in the home, depending on the amount of supplied ventilation. If the remote hose is used, there may be a slight rubber odor. These odors will dissipate within days of installation.

If the homeowner sees the humidifier is not humidifying but there is a call for humidity, it is likely the unit is operating in drain cycle mode. Ask the homeowner to check again in an hour if they are concerned the device may not be operating.

If the Call Service light is blinking, instruct the homeowner to press and hold the Reset button to clear the fault. If the fault doesn't clear, unplug the power the humidifier and plug back in to the electrical outlet. Wait 24 hours prior to calling a contractor. The call service light may be blinking due to a low voltage condition in the area and will reset to operate correctly when full power is restored.

There may be a slight increase in the homeowner's energy consumption. However, when operating correctly, the humidifier will make the home feel warmer, allowing the homeowner to lower the temperature setting on the thermostat. Every degree lower on the thermostat can save up to 3% on heating costs.

WHAT YOU WILL NEED TO INSTALL THE HUMIDISTAT

Tools/Hardware needed:

- Wire stripper/cutter
- Drill or duct-cutting tool
- 1-3/4-in. hole saw
- 1/8-in. drill bit
- Phillips and slotted (or Torx) screwdriver
- 18-gauge thermostat wire (5 or 2 conductor)

Material Provided:

- 1/4-in. copper or plastic water line
- 1/2-in. drain hose and clamps
- Mounting bracket and hardware
- In-line water filter* (50028044-001)
- Saddle valve
- Back-flow valve (50030142-001)

Options:

- Remote Installation Kits
  - 10-foot hose and nozzle kit (50024917-001)
  - 20-foot hose and nozzle kit (50024917-002)
- Humidity Controls
  - Manual Humidistat
  - Automatic Digital Humidistat
- Water line T-fitting
- Manual shut-off valve
- Remote hose P-trap
- Differential pressure switch (50027910-001)

** Warranty requires in-line water filter installation with regular service.*

SAFETY PRECAUTIONS

CAUTION: Voltage Hazard.
Can cause electrical shock or equipment damage.
Disconnect HVAC equipment before beginning installation.

Safety Precautions

- Do not direct the steam nozzle at people.
- If used near a pool or spa, ensure the humidifier can not fall into the water or be splashed. Also, ensure the humidifier is plugged into a GFI ground fault interrupt outlet.
- Water inside tank can be very hot. Follow installation instructions and service steps exactly as given in the technical literature.

Warning: Electrocution, Heavy Equipment, and Chemical Hazard.
Can cause death, blindness, water damage to home and heating element failure.

- Do not cut into any air conditioning or electrical line
- Wear safety glasses when cutting or drilling.
- Mount the humidifier in a level position to avoid water damage or heating element failure.
- Reinforce duct as necessary to ensure stability.

The preferred installation location is on the warm or supply side of the furnace. If that location is not possible, the steam nozzle should be inserted a minimum of 12 in. upstream of the furnace filter. Depending on the location and the duct rigidity, additional duct reinforcement may be necessary.

Warning: Steam Condensation, Fire, and Freezing Water Hazard.
Can cause failure of fan or limit control or result in water damage to home.

- Do not install the humidifier where the ambient temperature is lower than 32°F (0°C) or higher than 120°F (49°C).
- Do not install the humidifier through sidewalls of a return air duct made of wood (e.g., floor joist).
- The mounting area must be strong enough to support the humidifier's weight when it is full of water (approximately 12 to 15 lbs.), and to hold the humidifier in a level position for safe, reliable operation. Otherwise, additional duct or wall reinforcement will be necessary.
- If the ducting has exposed insulated materials on the interior, ensure the nozzle extends beyond the insulation by clearing away excess insulation at the insertion point. You may wish to replace a section of insulated duct (approximately 6 in. x 6 in.) with rigid, non-insulated sheet metal to ensure effective installation.
- Mount the unit where it will have smooth air flow across the end of the steam nozzle.
- Allow at least 1 foot clearance to ventilation holes in humidifier's cover. Do not cover these holes. Covering them can increase the internal operating temperature of the humidifier and shorten the humidifier's life.
- Allow at least 4 inches of clearance between the steam nozzle insertion hole and the top of the interior duct to avoid condensation forming. The mounting template is designed to allow clearance if the top of the template is at or below the top surface of the interior duct.
- Do not mount directly to duct board.
- Do not install in completely enclosed spaces, such as a cabinet or unventilated closet. Choose a location that is well ventilated.

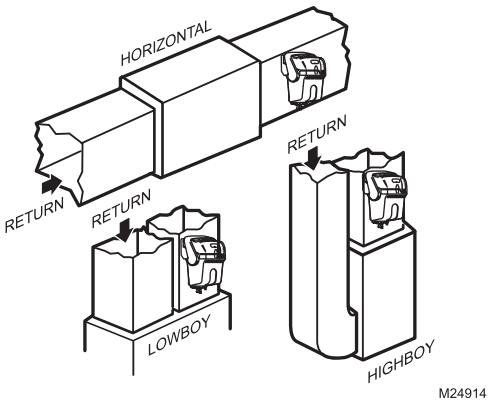
If installing the humidifier directly to the supply duct, follow steps on pages 5–6 and 14–18. If mounting remote from the duct, follow steps on pages 7–18.

DUCT MOUNT INSTALLATION

1

Choose a location that has access to a:

- Drain allowing a slope of 1/4 in. per foot of drain hose.
- Cold water line.
- Electrical circuit rated to your humidifier.
- Vertical surface with adequate clearances.



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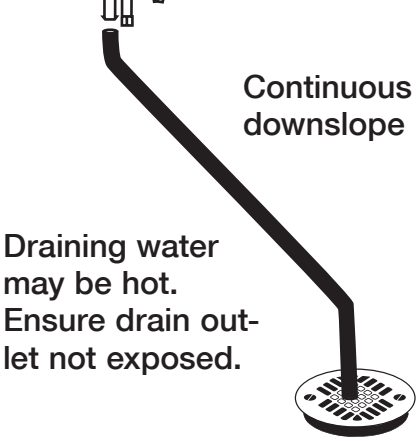
Continuous downslope

Draining water may be hot. Ensure drain outlet not exposed.



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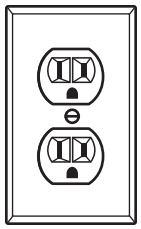

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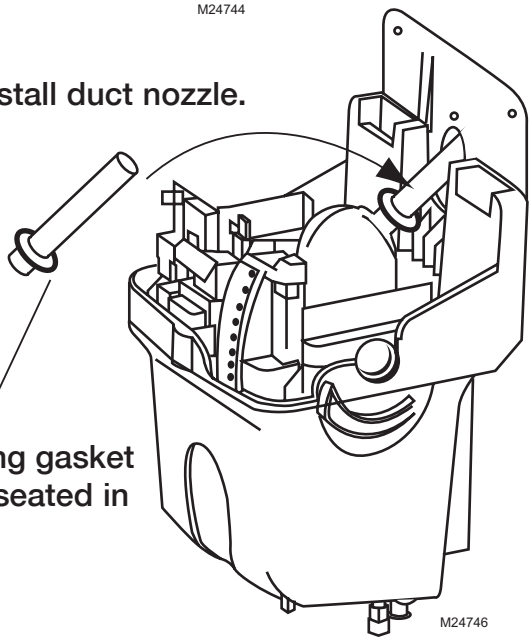
Model	Required Minimum Circuit Capacity
RXIH-AS06A	7 Amps
RXIH-AS09A	10 Amps
RXIH-AS12A	12 Amps

CAUTION
Hot water temperature above 120°F (49°C) can cause burns from scalding.

2 Install duct nozzle.



Ensure o-ring gasket is properly seated in the groove.

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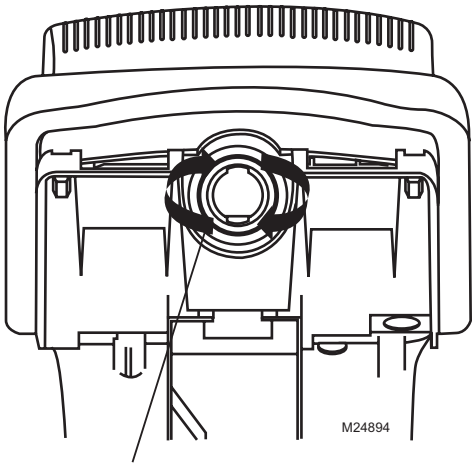

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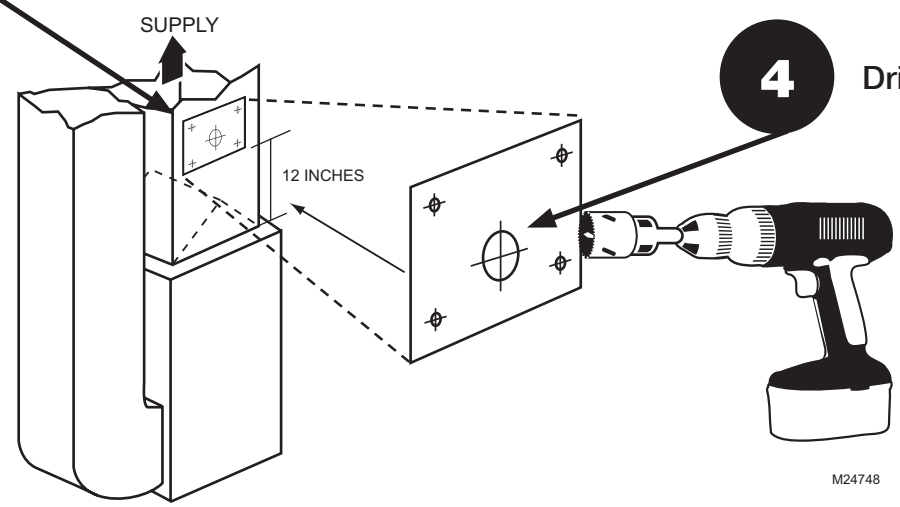
Insert nozzle and twist clockwise to ensure tight seal of nozzle to the humidifier.

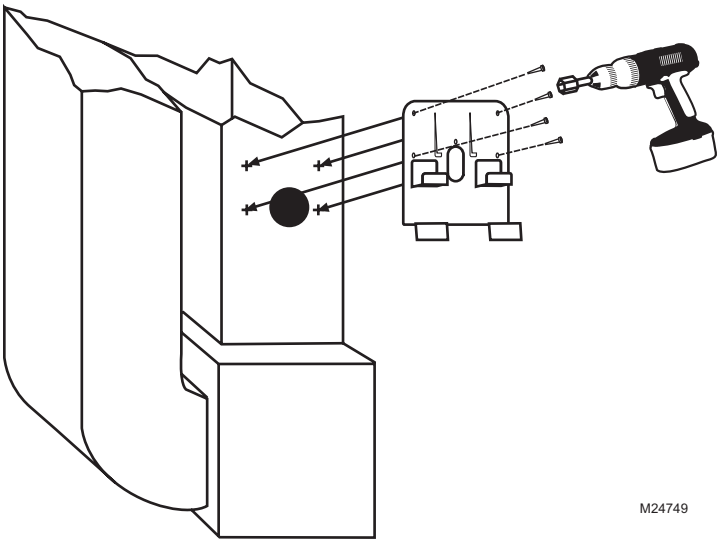
DUCT MOUNT INSTALLATION

3 Position template sticker on supply duct. For tall coils that do not have this clearance available, refer to remote mounting instructions.



4 Drill 1-3/4-in. hole.

5 Secure bracket to duct using #8 self-drilling sheet metal screws (4).

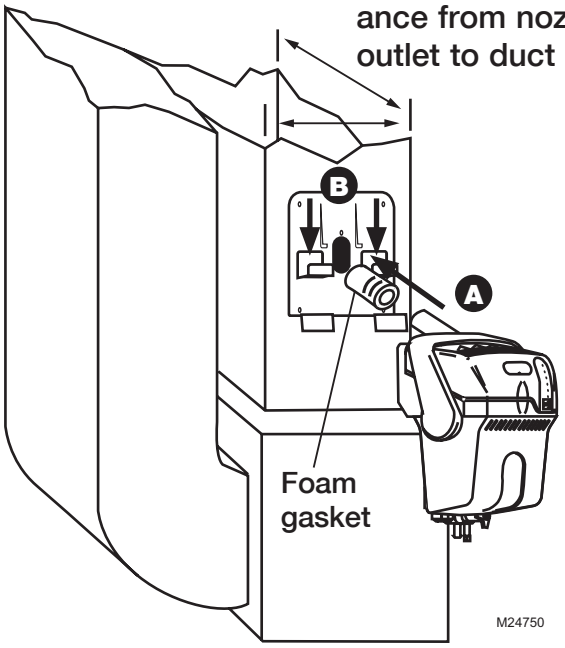


6

A) Slide foam gasket over nozzle and insert the nozzle into duct hole (pictured).

B) Push down to secure humidifier to bracket arms. Ensure gasket forms tight seal in duct hole.

Allow 3 in. clearance from nozzle outlet to duct wall.



Proceed to page 14 for plumbing and wiring instructions.

REMOTE MOUNT INSTALLATION

Use for mounting to a location other than the supply duct.

Most operation problems are caused by improper hose installation. Always ensure an uphill flow when installing the remote hose, and avoid kinks, sharp turns, or low spots that could restrict the flow of steam into the injection nozzle or condensation back into the humidifier.

If the remote hose cannot be installed with an upward pitch of 2 in./ft., a wetted drip tee must be installed. Failure to do so can result in back pressure on the humidifier, which can lead to duct nozzle water spitting or leaking gasket. Remote hose must be supported to prevent sagging or low spots.

When remote mounting, also follow these critical steps in sizing the proper humidifier:

The 6-gallon model can be remotely mounted up to 15 feet if insulating the steam distribution tube

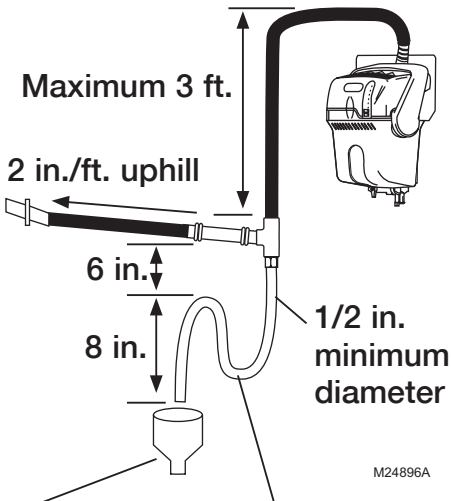
The 9- and 12-gallon models can be remotely mounted up to 20 feet.

Ensure at least 2 in. per foot slope if installing the remote hose horizontally.

1 Choose a location for the humidifier and the remote duct nozzle (see remote installs on page 8).

It should have access for:

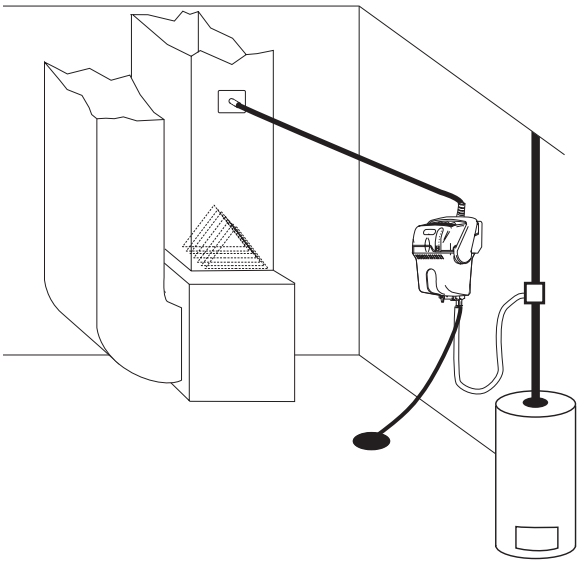
- Remote hose installation. Steam hose must be installed with 2 in./ft. pitch on a continuous uphill slope.
- Drain. Allow a continuous downslope to the drain.
- Cold water line.
- Electrical circuit rated to your humidifier (see circuit ratings on page 10).



Funnel or floor drain. Refer to governing codes for drain pipe size and maximum temperature requirements.

PROPER HOSE INSTALLS

Furnace or Mechanical Room Remote



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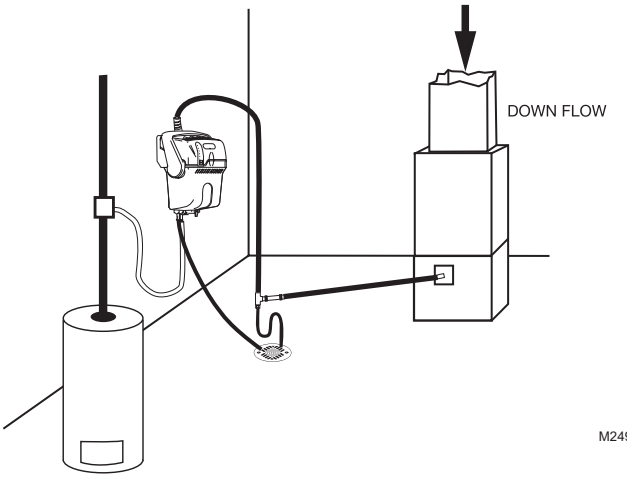
Note: If air handler location temperatures will drop below freezing at any time, the humidifier must be mounted in a conditioned space, running a remote hose to the duct.

CAUTION
Hot water temperature above 120°F (49°C) can cause burns from scalding.

Duct Mount Remote



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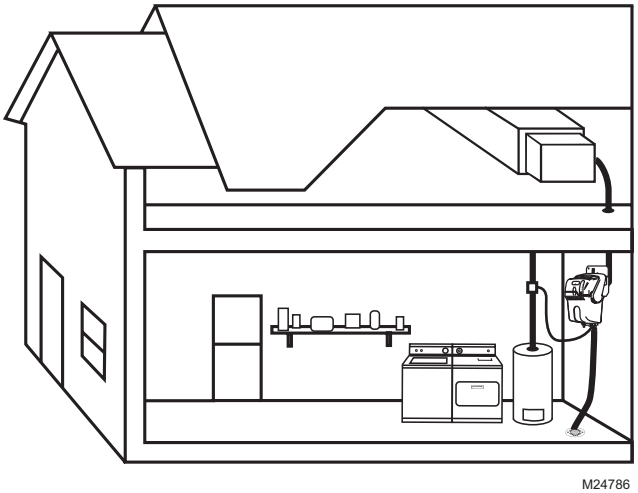
Living Area Remote Options



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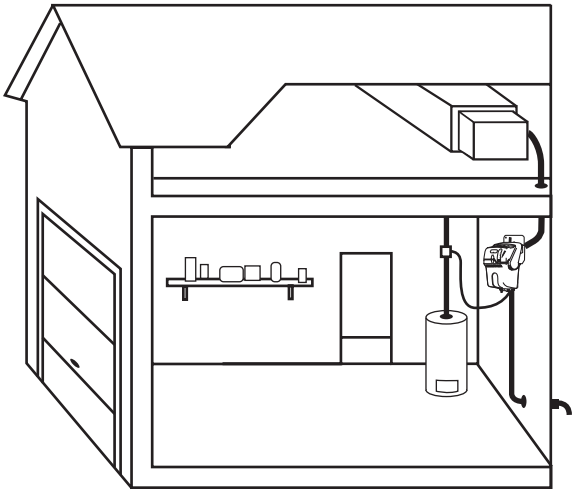
Garage Remote



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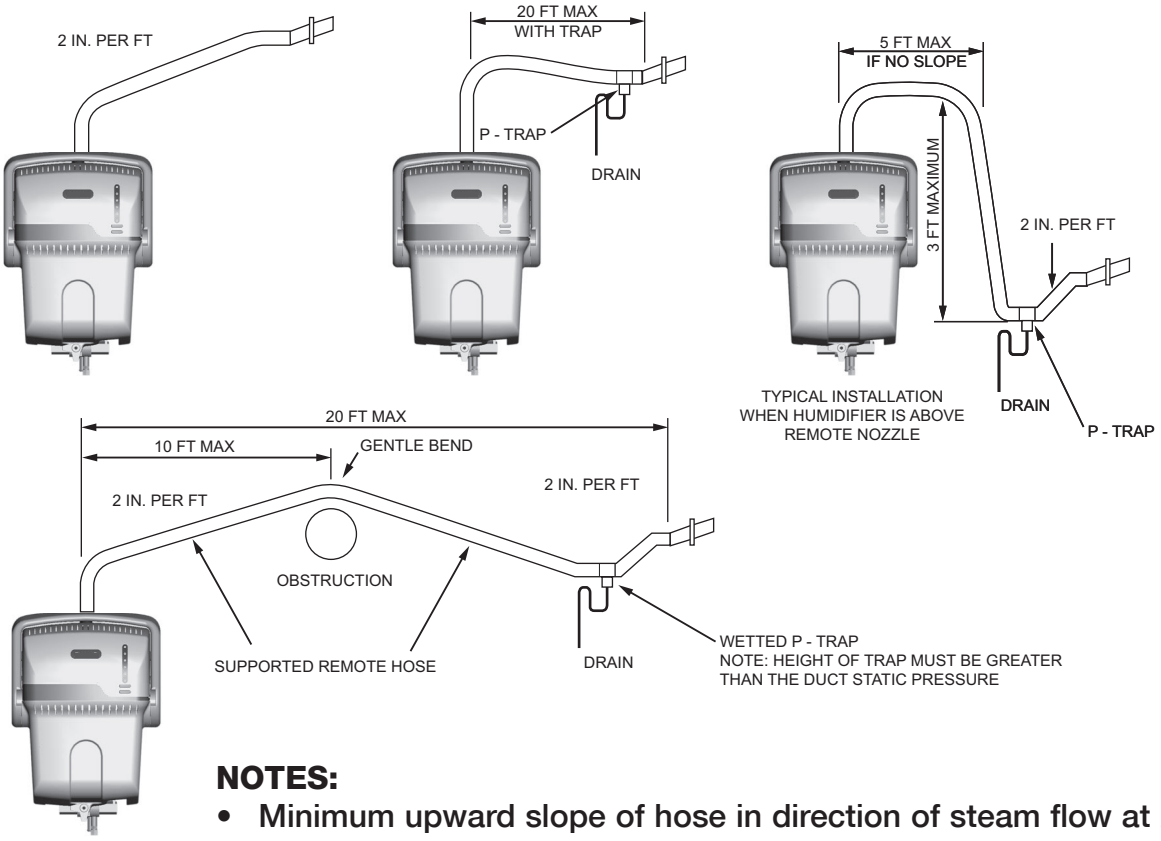
Draining water may be hot. Ensure drain outlet not exposed.

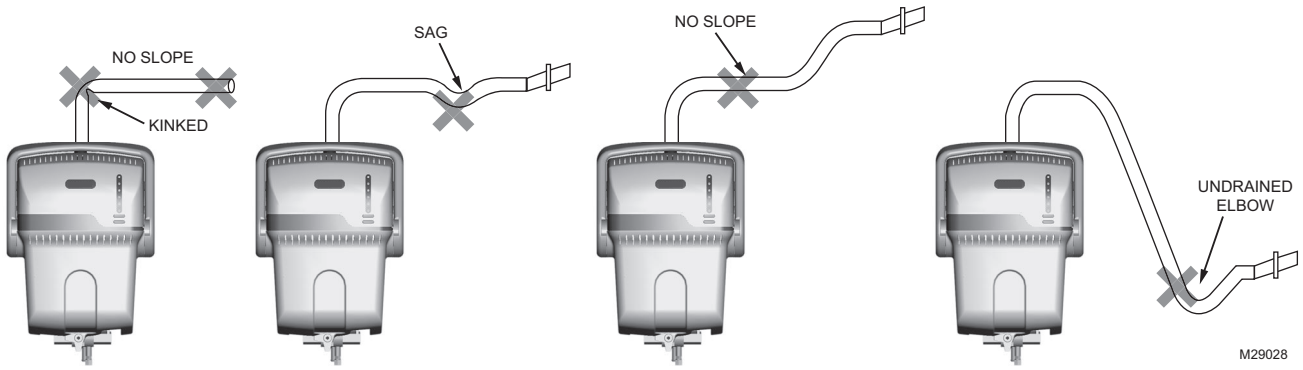
PROPER HOSE INSTALLS



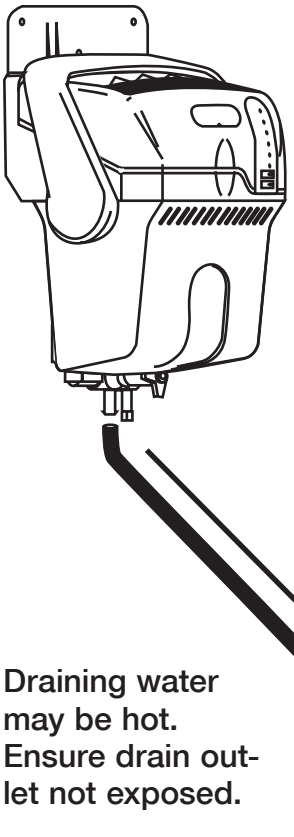
NOTES:

- Minimum upward slope of hose in direction of steam flow at 2 in. per foot;
- Minimum downward slope of hose in direction of steam flow at 3/4 in. per foot;
- Maximum length of remote steam hose is 20 ft.
- Height of P-traps must be greater than the duct static pressure. (Typical 3 in. will suffice.) P-trap must also be wetted (see page 7).
- Minimize sharp bends and elbows.

AVOID THESE INSTALLATION MISTAKES.



REMOTE MOUNT INSTALLATION



Draining water may be hot. Ensure drain outlet not exposed.

Continuous downflow

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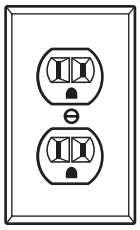
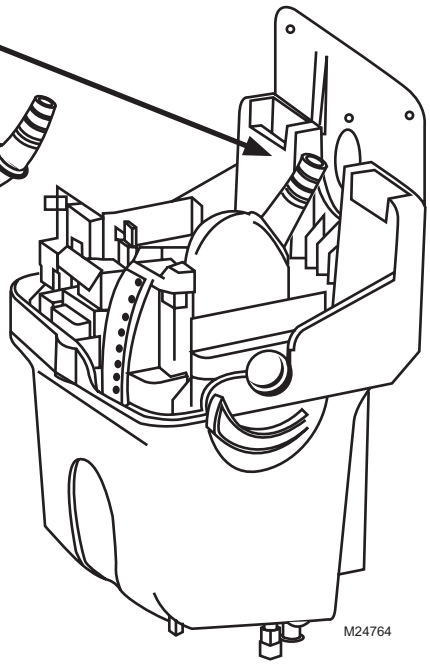


M24745

Model	Minimum Circuit Capacity
RXIH-AS06A	7 Amps
RXIH-AS09A	10 Amps
RXIH-AS12A	12 Amps

2 Install hose adapter from Remote Mount Kit.

Ensure o-ring gasket is properly seated in the groove.



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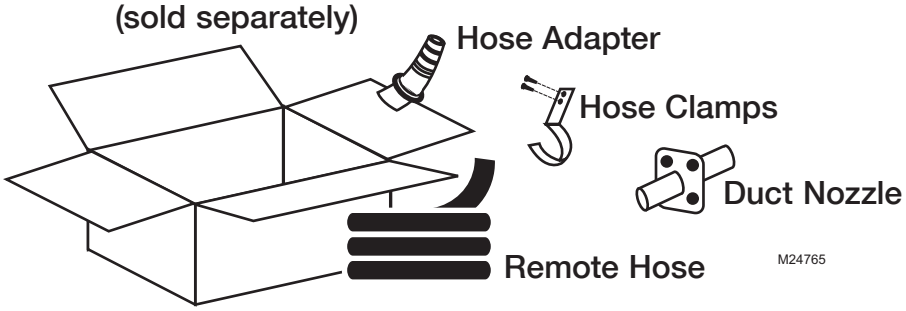
CAUTION
Hot water temperature above 120°F (49°C) can cause burns from scalding.

Remote Mount Kit
(sold separately)



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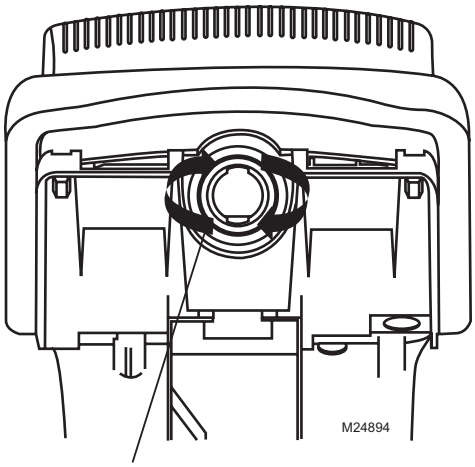
- 50024917-001 = Ten Foot Insulated Hose Kit
- 50024917-002 = Twenty Foot Insulated Hose Kit



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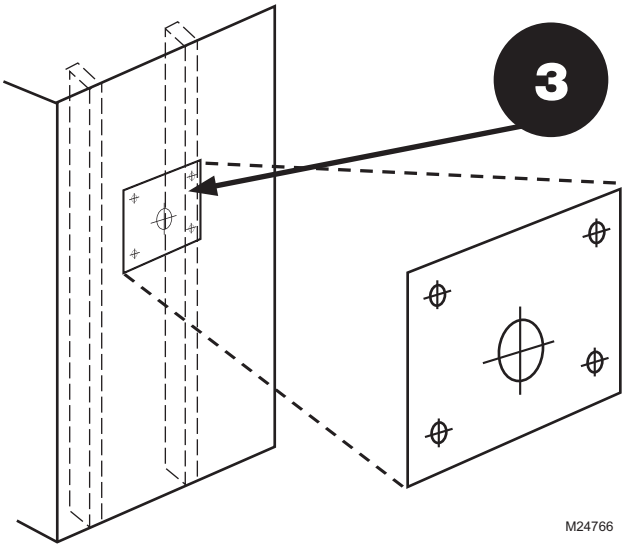
Insert hose adapter and twist clockwise to ensure tight seal of nozzle to the humidifier.

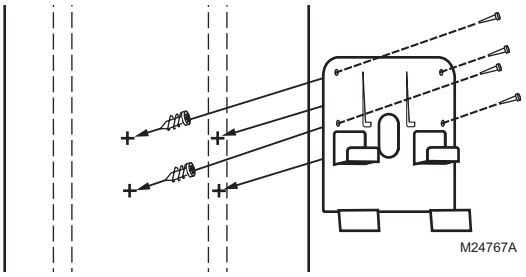
REMOTE MOUNT INSTALLATION



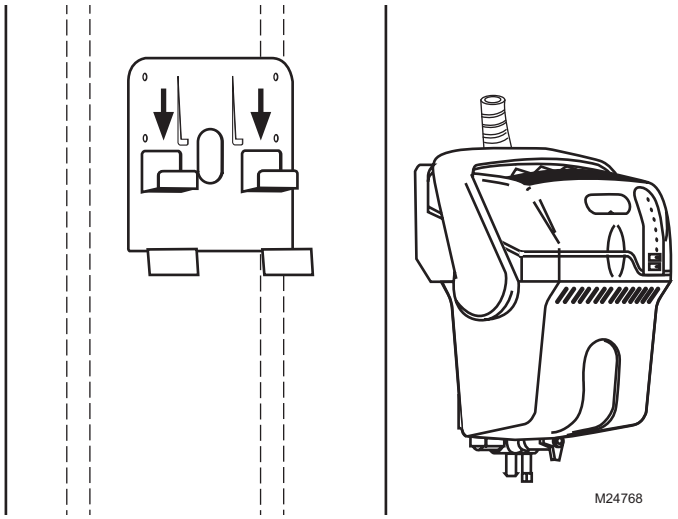
3 Position template sticker on remote location.

Note: The humidifier will weigh 12–15 lbs. (+/- 2 lbs.) with water, so if mounting onto drywall or plaster, position one side over a wall stud.

4 Insert wall anchors (4) into pilot holes and secure bracket to location.



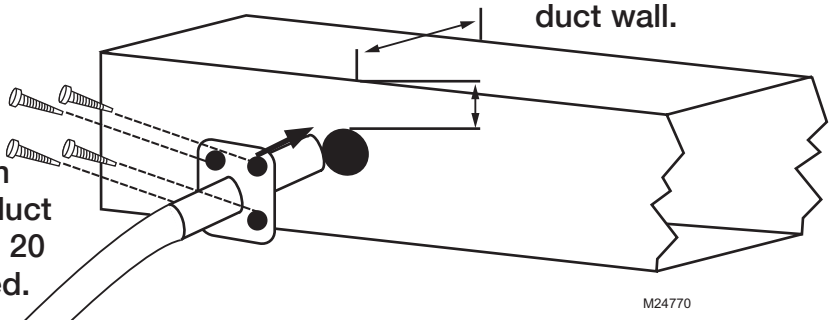
5 Push down to secure the humidifier to bracket arms.



REMOTE MOUNT INSTALLATION

6 Cut a 1-3/4 in. diameter duct hole, install the provided gasket, and slide the remote nozzle up into the duct. Secure remote nozzle to duct using #8 self-drilling sheet metal screws (4).

Minimum 3 in. clearance required from nozzle outlet to duct wall.



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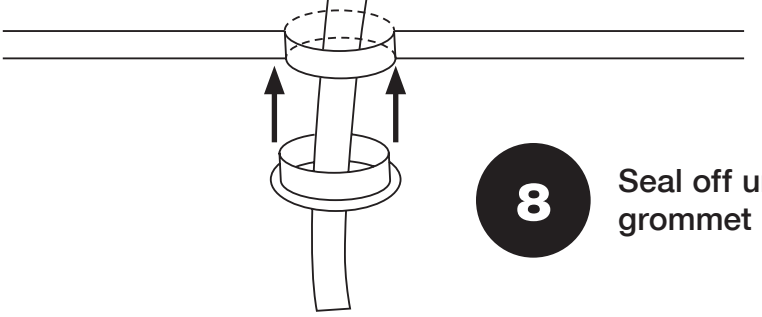
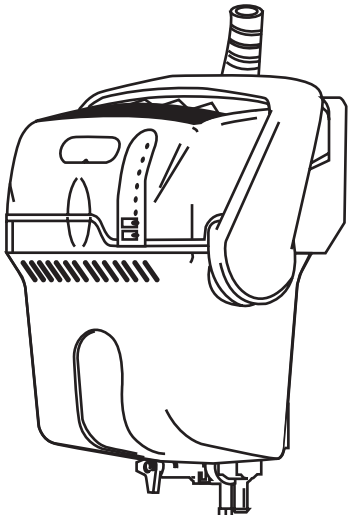
7 Run remote hose from the humidifier to the duct nozzle location. Up to 20 ft. of hose can be used.



If mounting remotely requires running hose through structural barriers (ie. wall or ceiling), cut at least a 2-1/8 in. hole and slide hose through.

8 Seal off unconditioned space with a grommet (not provided) or caulk.

9 Attach remote hose by sliding over the nozzle and adapter. Secure both hose ends with clamps (provided).



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IMPORTANT:

Run hose continuously uphill. For horizontal runs, ensure a slope of 2 in. uphill per foot. Secure hose every horizontal foot using clamps (provided).

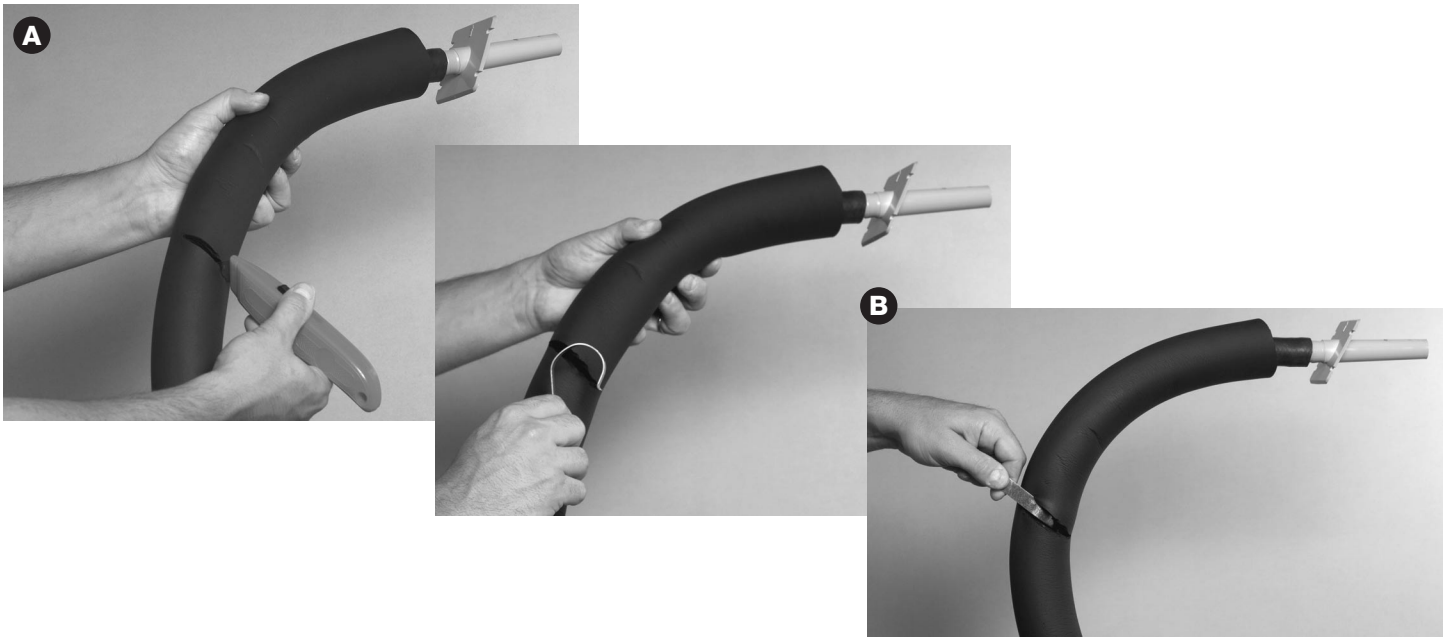
For long horizontal runs, support the hose by first securing a length of 2 x 4 lumber, U-channel, or angle iron with the appropriate slope. Then attach the hose to the top of this support. If remote hose requires downward pitch, refer to pages 7 and 9 for instruction.

REMOTE MOUNT INSTALLATION

To install clamps onto the insulated steam hose:

Ⓐ Cut a slit in the insulation half way around the house. Do not cut into the steam hose.

Ⓑ Insert the hose clamp into the slit and hook it onto the hose.



PLUMBING

10

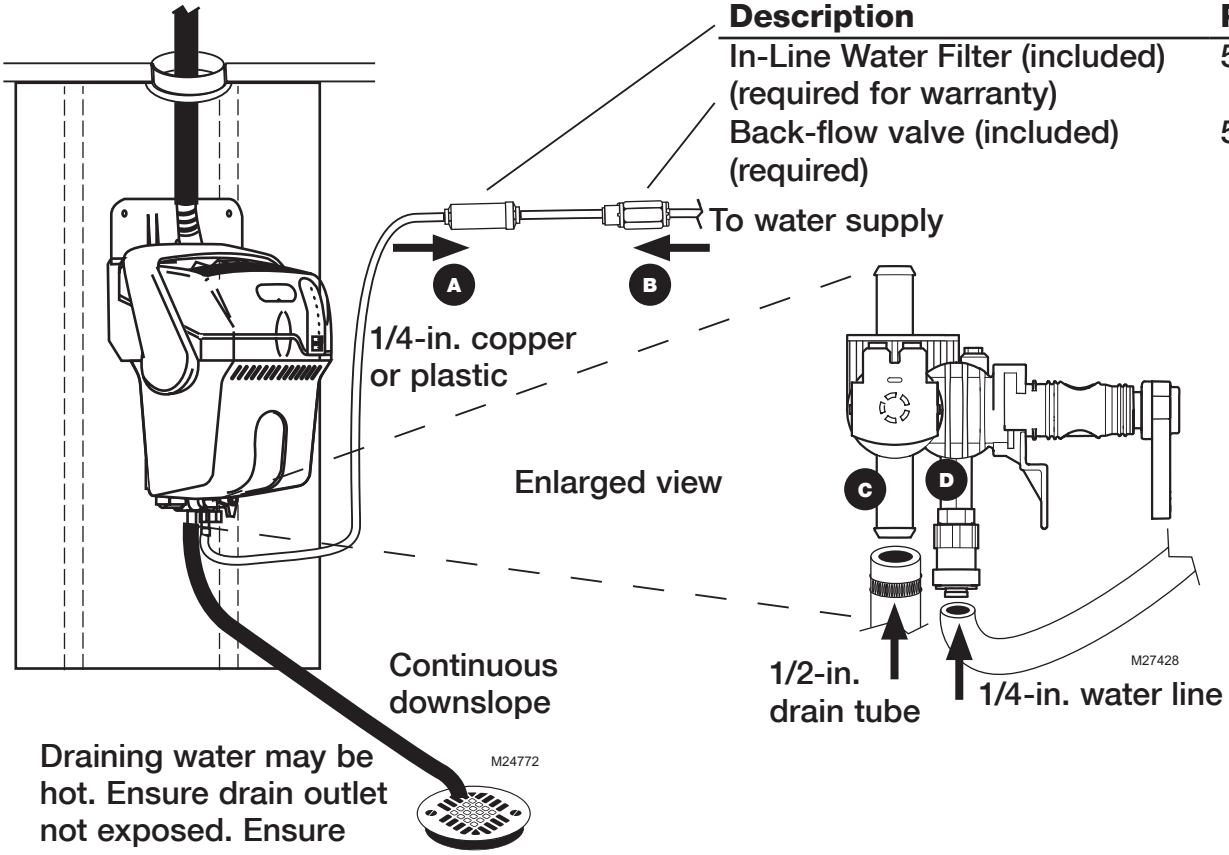
A Insert 1/4-in. water line into filter. Apply modest pressure to ensure a tight fit.

B Insert 1/4-in. water line into back-flow valve. Apply modest pressure for a tight fit.

C Connect 1/2-in. drain tube. Secure drain tube to barbed fitting with hose clamp.

D Shut off the water supply. Secure 1/4-in. copper or plastic water feed tube.

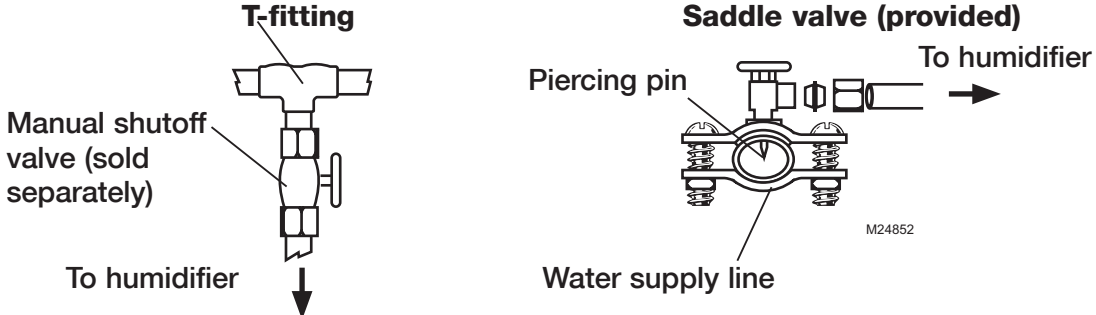
Description	Part Number
In-Line Water Filter (included) (required for warranty)	50028044-001
Back-flow valve (included) (required)	50030142-001



Draining water may be hot. Ensure drain outlet not exposed. Ensure drain or condensate pump is rated for at least 120°F water.

CAUTION
Hot water temperature above 120°F (49°C) can cause burns from scalding.

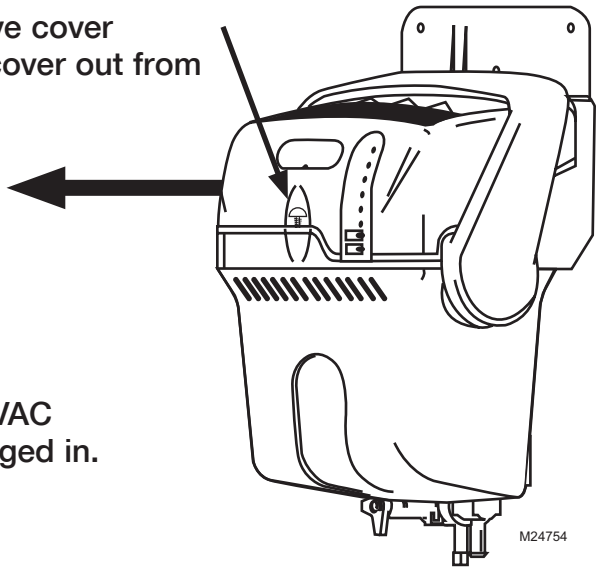
Water line tapping options. See instructions provided with the option you choose.



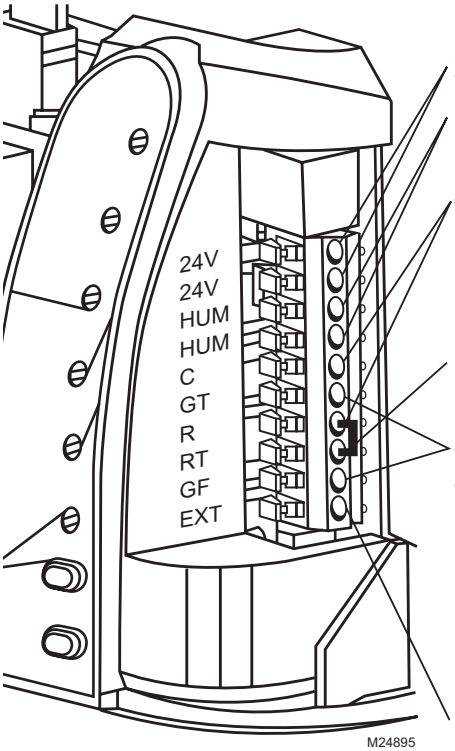
Check all water line connections to ensure no leaks once the humidifier is operational.

WIRING

11 Loosen captive cover screw. Slide cover out from front.



CAUTION: Voltage Hazard.
Before wiring to HVAC terminals, disconnect HVAC equipment power. Ensure humidifier is not plugged in.



Low-Voltage Terminals

24V AC power for electronic humidistat.

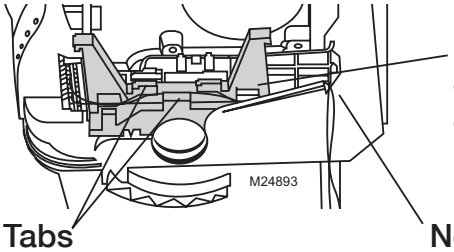
HUM Low-voltage humidistat (or thermostat) terminals control humidifier operation.

C, R Connects to HVAC system transformer terminals (or relay transformer fan control R and C) to ensure HVAC power is present before humidifying. This can be disabled by changing DIP switch 4 (see page 18).

RT Connects to thermostat R terminal, which is normally switched to call for fan.

GT, GF GT connects to thermostat G terminal. GF connects to fan board G terminal. Thermostat G passes through the normally-closed (NC) relay contacts to GF, allowing fan activation. When the humidifier is ready to provide humidity to the home, it will take control of the fan by forcing power from RT to GF (if not already activated).

EXT When a 24-vac fan board is not used to control blower (hydronic or cooling-only applications), this connection with GF provides dry-contact closure for fan calls. EXT/GF may be wired to a low-voltage relay control center to provide line-voltage fan control.

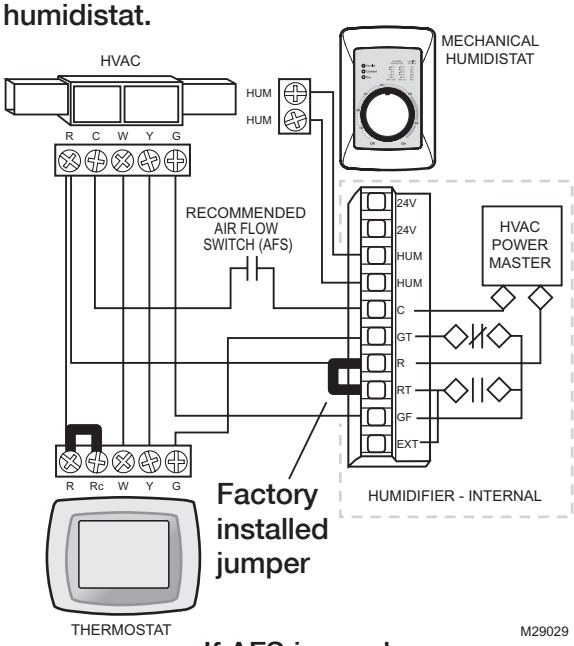


Route wires through the raised harness tabs and out the notch at the rear of the chassis. Ensure wires are secure and do not interfere with assembly of cover.

WIRING

12 Wire the humidifier according to the diagram that applies to your humidity control.

Follow this diagram if using a mechanical humidistat.

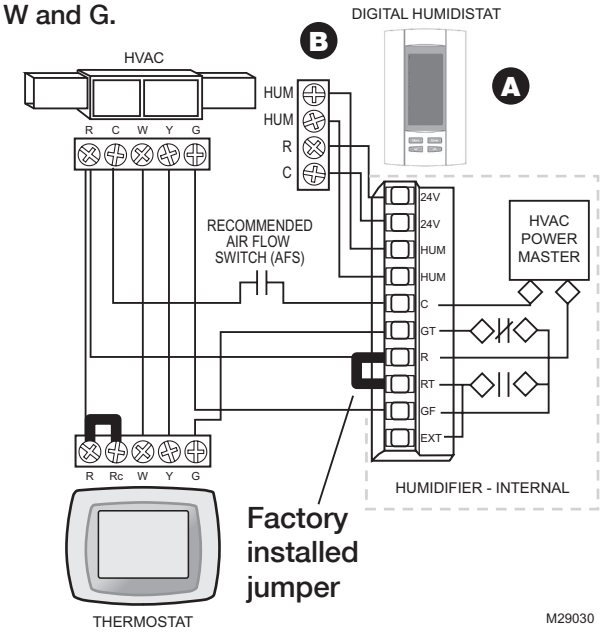


If AFS is used, ensure DIP 5 is in ON position.

Follow this diagram to wire Automatic Digital Humidistat for manual operation.

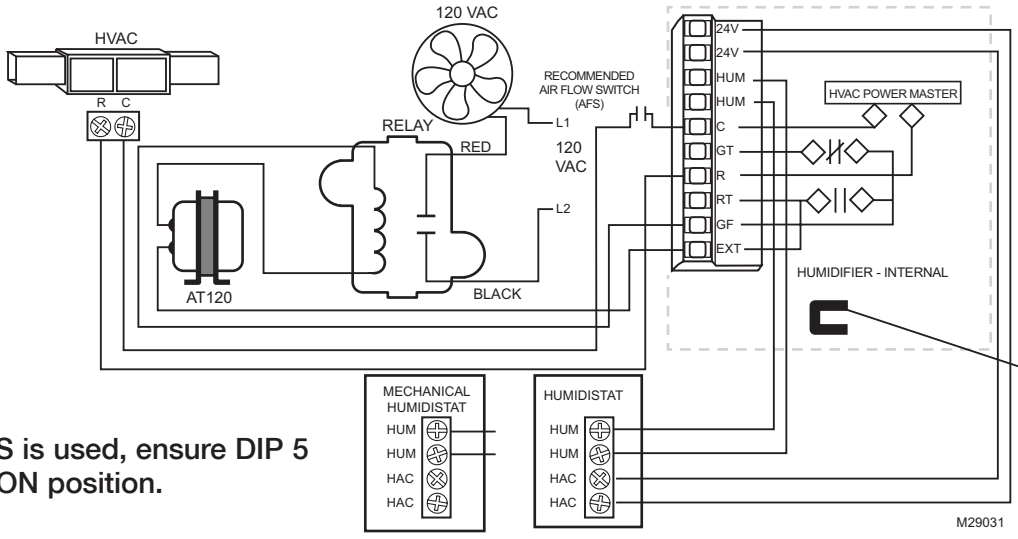
A Set the digital humidistat ISU parameter 10 to 1, and ISU 25 to 2.

B For auto-operation: also wire W and G to thermostat W and G.



If AFS is used, ensure DIP 5 is in ON position.

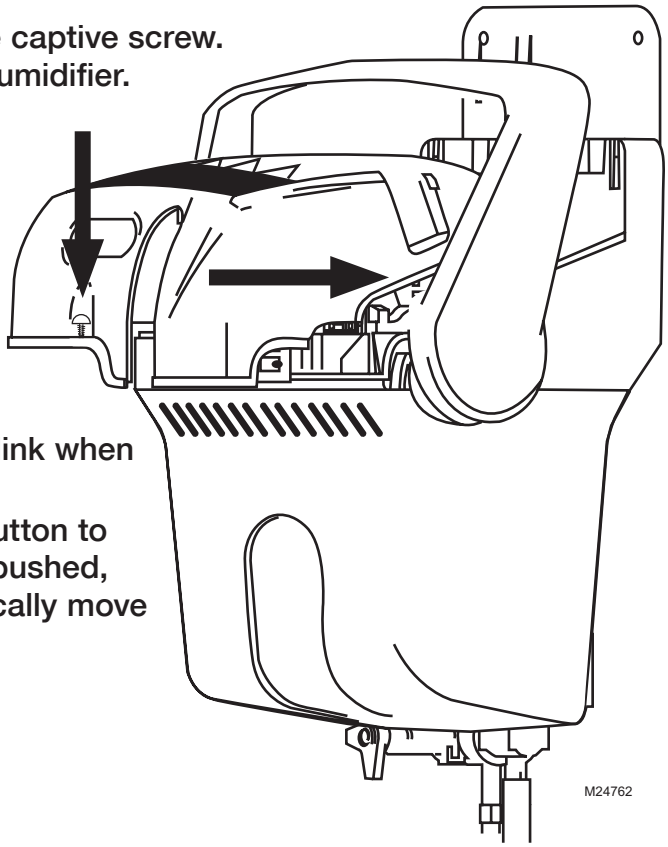
Follow this diagram if using a blower fan dedicated to the humidifier (a fan separate from the HVAC equipment, as in hydronic or cooling-only applications).

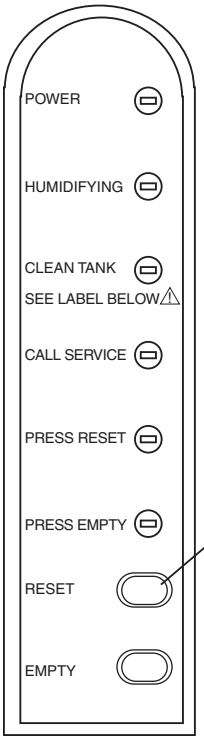


If AFS is used, ensure DIP 5 is in ON position.

WIRING

13 Slide the cover back into place and secure captive screw. Turn on the water supply and plug in the humidifier.





14 The Press Reset light will blink when power is applied.

Press/release the RESET button to ready the humidifier. If not pushed, the humidifier will automatically move to ready after five minutes.

15 Turn the control to a high setpoint (60% +). Be sure to turn this back down when testing is complete. “Off” will turn the humidifier off.

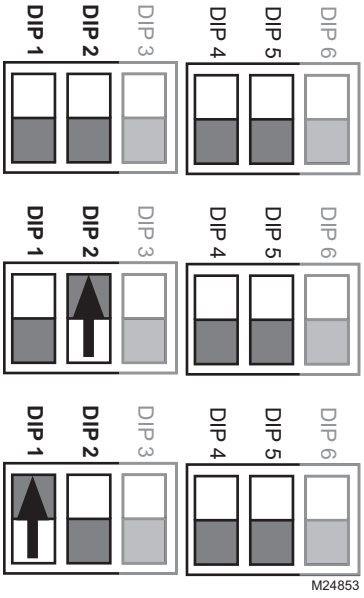
16 Confirm that the furnace blower turns on to circulate air. This will take about 10–15 minutes upon call for humidity.

Important for Remote Installation:

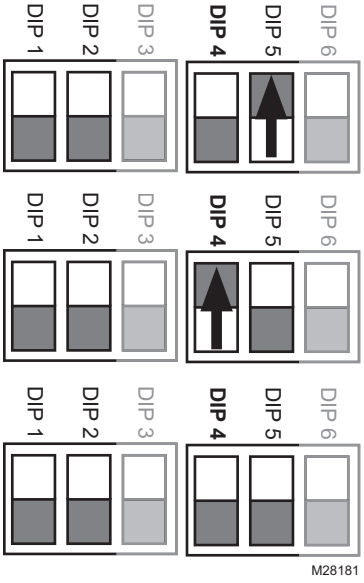
After the humidifier has produced steam for 10–15 minutes, check the integrity of the remote hose to ensure no sags have occurred. Add or adjust clamps if necessary to ensure 2 in. per foot continuous slope.

DIP SWITCH SELECTION

Between the transformer and LED display on the circuit board are two sets of DIP switches. DIP 1 and 2 can be configured to adjust cleaning cycles. DIP 4 and 5 can simplify wiring. DIP 3 and 6 are not used at this time. Details below.



Run time (hrs)	End-of-Season timer (hrs)	Clean tank indicator
10 hrs of humidifying before system auto-flushes debris from tank.	48 hrs before system auto-drains and remains empty until next call for humidity.	1 year of total time (operational and inactive) before the Press Empty light will blink, indicating it is time to manually clean the water tank.
20 hrs of humidifying before system auto-flushes debris from tank.	48 hrs before system auto-drains and remains empty until next call for humidity.	1 year of total time (operational and inactive) before the Press Empty light will blink, indicating it is time to manually clean the water tank.
30 hrs of humidifying before system auto-flushes debris from tank.	48 hrs before system auto-drains and remains empty until next call for humidity.	1 year of total time (operational and inactive) before the Press Empty light will blink, indicating it is time to manually clean the water tank.



DIP 4 OFF, DIP 5 ON: If the humidifier determines that no airflow* is present two minutes after the blower fan call, it will shut down steam output and activate a service light.

**Requires installation of air flow switch. See 'Wiring' section for details.*

DIP 4 ON, DIP 5 either setting: The humidifier will allow humidity without HVAC power present and without airflow.

DIP 4 OFF, DIP 5 OFF: The humidifier will not be allowed to humidify without HVAC power being present.

TROUBLESHOOTING

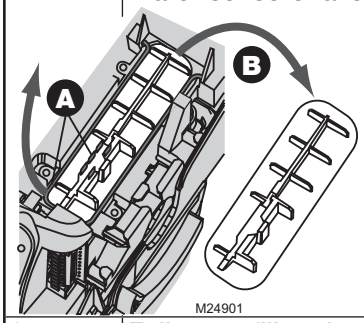
The humidifier has internal system diagnostics that monitor system operation, maintenance schedules, and faults. If a system fault is detected, the system will attempt to recover itself up to five times in a 24 hour period. If unable to recover in that time, the red Call Service LED light will activate.

If the humidifier Call Service light is red, a system fault has occurred from which the humidifier can not recover by itself. The table below shows the possible faults, along with steps to fix the humidifier.

If the red Call Service LED light is on, press/release the RESET button. The red Call Service LED light will begin blinking in a series that indicates what fault occurred. Refer to the table below for the fault signified by the number of blinks that occur. To clear the fault, press and hold the RESET button for 5 seconds.

Press/hold the EMPTY button to clear the Service Timer light (i.e. the Press Empty button).

Press/release the EMPTY button to drain the tank.

No. of Red Light Blinks	Fault Description	Auto-Recoverable?	Steps to Fix To be Performed by Professional HVAC Technician Only
1	Water/Heater temperature sensor failed.	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	• Unplug the humidifier and remove cover. • Check water sensor connection to electronic board. • Reattach cover and plug the humidifier in. • If fault reappears, follow the cleaning steps on pages 23–25. • Reassemble tank and press the RESET button. • If fault returns, replace with applicable wattage heating element.
2	Water sensors failed. 	Yes, system will return to “Ready” if fault no longer exists in 1 hour. Will attempt to reset itself 5 times in 24 hours.	• Unplug the humidifier and remove cover. • Ⓐ Disconnect water level sensor wiring, remove screen and lift snap-hinge clamp. Ⓑ Remove water sensor assembly. • Clean water sensor probes using warm soapy water so that the metal is exposed. • Reassemble the sensor assembly in the unit, reattach and secure cover. • Plug unit back in and press the RESET button. • If fault reappears, replace sensor assembly.
3	Failure to fill tank with water.	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	• Ensure inlet water is on. • Check for leaks around the tank seal and solenoid. • Turn off water supply and replace in-line water filter. • Press/hold RESET button until the red Call Service light turns off. • If tank still fails to fill, press the EMPTY button (if unit fails to drain, unplug unit and make sure water in tank is cool). • Follow tank cleaning instructions on page 23. Ensure you have a firm grip of the tank prior to releasing the tank, especially if water is present. • Clear any excess debris from the tank’s bottom orifice to the solenoid. • Reassemble tank and plug unit back in. Press the RESET button. • If water still fails to flush into the tank, replace the solenoid valve.

TROUBLESHOOTING

No. of Red Light Blinks	Fault Description	Auto-Recoverable?	Steps to Fix To be Performed by Professional HVAC Technician Only
4	Heating element overheated.	No	• Follow tank cleaning steps (pages 23–25). • Reassemble tank and press the RESET button. • If fault returns, replace with applicable humidifier.
5	Input voltage insufficient.	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	• Unplug and replug the unit in to see if the fault returns. • If fault returns, unplug unit and remove cover. • Ensure wiring connections are secure and attached. • If fault returns, replace the humidifier with a new one (field service is not recommended in the event line voltage is lost).
6	Water overflow sensed.	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	• Ensure drain hose is not kinked or submerged in water at the drain. Check functionality of condensate pump if used. • Check for water coming out of drain/overflow line. If continuous water flow is present, follow the cleaning steps on pages 23–25. • Press EMPTY button to drain tank. • Set humidistat RH setpoint to Test mode. • If fault returns, unplug the humidifier. • Loosen cover screw and remove cover. • Disconnect water level sensor wiring and lift snap-hinge clamp to remove water sensor assembly. See image on page 19. • Clean probes using warm soapy water so that the metal is exposed. • Reassemble the sensor assembly in the unit, reattach and secure cover. • Plug unit in, and press RESET button. • If fault reappears, replace water sensor assembly and/or solenoid valve.
7	HVAC power not present (monitor this fault only when DIP 4 and 5 are OFF).	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	• Unplug and replug the unit in to see if power returns. • If not, ensure HVAC equipment has power. Check circuit breaker and replace fuse if circuit is tripped. • Unplug the humidifier and remove cover. • Ensure DIP 4 is ON and reattach cover. • Plug unit in. • If fault reappears, ensure the circuit being used has the rating to support the unit. Unplug any additional equipment plugged into this circuit. If fault disappears, the circuit capacity is not properly sized to your unit. • If fault returns, replace unit.

TROUBLESHOOTING

No. of Red Light Blinks	Fault Description	Auto-Recoverable?	Steps to Fix To be Performed by Professional HVAC Technician Only
8–11	The backup weld monitor input is active when the backup heater relay is off.	No	• Replace the unit.
12	Temperature of the electronic circuit board is too high.	Yes, system will return to "Ready" if fault no longer exists in 1 hour.	• Ensure ventilation holes in the cover are clear of obstruction, and that 1 foot of clearance is maintained around the cover's vent holes. • Ensure the humidifier is installed in a location with conditioned air 32°F (0°C) to 104°F (40°C). • Turn humidistat off and allow time for electronic board to cool. • Turn humidistat on and press RESET button. • Confirm humidity call starts by HUMIDIFYING light turning on. • Allow unit to run and check for steam leaks around tank and ventilation holes. • If steam is present, replace the humidifier.
13	Tank failed to drain.	No	• Water in tank may be hot (>140ºF [60ºC]). • Press the EMPTY button. • If unit fails to drain, wait for water in tank to cool. Ensure tank water is cool before proceeding. • Once cool, follow tank cleaning steps (pages 23–25). • Reassemble tank and press the RESET button. • If fault persists, replace the solenoid valve.
14	Heater failed to boil water.	Yes, system will return to "Ready" if fault no longer exists in 1 hour.	• Follow tank cleaning steps (pages 23–25). • Reassemble tank and press the RESET button. • If fault returns, replace the heating element with the applicable wattage replacement part.
15	No Airflow.	Yes	• Ensure Differential Pressure Switch is installed and wired correctly. See the Wiring section for proper wiring. • Ensure DIP switches are set correctly. • If fault persists, replace AFS and/or unit.

SPECIFICATIONS

Capacity:
RXIH-AS12A: 12 gallons per day (gpd)
(45 liters per day [lpd])
RXIH-AS09A: 9 gpd (34 lpd)
RXIH-AS06A: 6 gpd (23 lpd)

Humidified Area:

House Description	Air Changes Per Hour	RXIH-AS12A	RXIH-AS09A	RXIH-AS06A
Loose	Two	2000 ft^2	1300 ft^2	1000 ft^2
Average	One	2500 ft^2	1800 ft^2	1500 ft^2
Tight	One-half	3000+ ft^2	2500 ft^2	2000 ft^2

Weight:

Model	Empty	Filled with Water
RXIH-AS12A	9 lbs.	15 lbs.
RXIH-AS09A	9 lbs.	14.5 lbs.
RXIH-AS06A	8 lbs.	12 lbs.

- Dimensions: 11-1/4 in. W x 19 in. H x 9 in. D
- Humidifier Operating Temperature Range: 34ºF–120ºF (1.1ºC–49ºC)
- Remote Hose/Nozzle Operating Temperature Range: -50ºF–250ºF (-46ºC–121ºC)
- Operating Humidity Range: 0–95% RH, non-condensing

Drain Operation
- Auto flushing is configurable to 10, 20 or 30 hours of operational time (heating element active).
- During auto flushing, cold water will enter the tank to lower water temperature below 140ºF (60ºC) before draining.
- During manual flush (performed by pressing the EMPTY button) initial water temperature may be above 140ºF (60ºC). Ensure drain outlet is not exposed and use caution when pressing the EMPTY button, and do NOT attempt to remove the tank with water in it.
- Flush cycle takes approximately 15 minutes to empty the tank completely. To override, press/hold the EMPTY button while the “Clean Tank” light is blinking.
- Drain Hose Operating Temperature Range: 34ºF–212ºF (1.1ºC–100ºC)

CAUTION
Hot water temperature above 140°F (60°C) can cause burns from scalding.

Electrical Ratings and Tolerances

Input Ratings
- Power Supply: 120VAC +10/ -15%, 60Hz
  - RXIH-AS12A: 1440W at 120VAC at full load
  - RXIH-AS09A: 1200W at 120VAC at full load
  - RXIH-AS06A: 840W at 120VAC at full load
- RXIH-AS12A: 12A, 120VAC
- RXIH-AS09A: 10A, 120VAC
- RXIH-AS06A: 7A, 120VAC
- 15A, 120VAC interlock switch
- Thermostat/HVAC power monitor (R to C): 10mA resistive at 24VAC
- Field wiring terminals: 18–22 ga. solid
- HVAC power/airflow monitor: 10 mA resistive at 24 VAC

Output Ratings
- Relay output contacts:
  - Fan: 1.5A full load, 7.5A locked rotor at 24VAC
  - Heat and Backup: 15A resistive at 120VAC
- Fill Solenoid: 0.1A at 120VAC, 0.5 PF
- Drain Solenoid: 0.1A at 120VAC, 0.5PF
- Humidistat output contacts: 10mA resistive at 24VAC
- Humidistat power supply: 100mA at 24VAC

Standards & Approval Body Requirements

Underwriters Laboratories: UL998, File no. E185662.
Federal Communications Commission: Class B compliance, File no. YU555.

Intended to be used in accordance with the National Electrical Code (NEC), ANSI/NFPA 70, and the rules of the Canadian Electrical Code (CEC), Part 1, C22.1.

CLEANING AND SEASONAL OR VACATION MAINTENANCE

Maintenance is simple with the humidistat—just remove the water tank for cleaning.

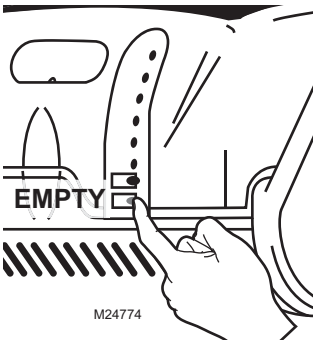
Warning: Scalding hazard.
Do not attempt to remove the humidifier from the mounting bracket during operation, or when the humidifier's water tank when full of water. Water heater could be hot when tank is removed. Failure to comply could result in severe scalding or death.

Drain Operation

- Auto flushing is configurable to 10, 20 or 30 hours of operational time (heating element active).
- During auto flushing, cold water will enter the tank to lower water temperature below 140°F (60°C) before draining.
- During manual flush (performed by pressing the EMPTY button) initial water temperature may be above 140°F (60°C). Ensure drain outlet is not exposed and use caution when pressing the EMPTY button, and do NOT attempt to remove the tank with water in it.

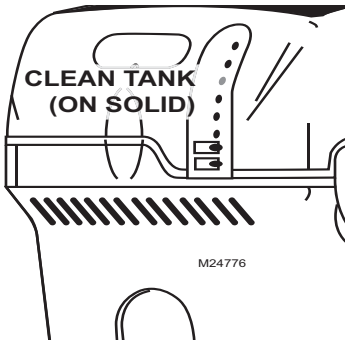
To clean the humidifier:

1. Press and hold the EMPTY button for 3 seconds. Wait for the CLEAN TANK light to be on solid (not blinking). The flush cycle takes approximately 15 minutes to empty the tank completely. To override the flush cycle press/hold the EMPTY button a second time for 3 seconds. The tank will drain immediately.



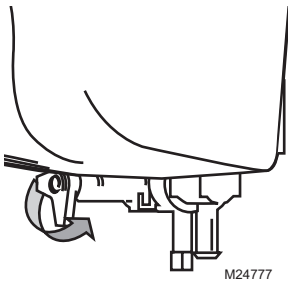
Wait

Go to Step 2

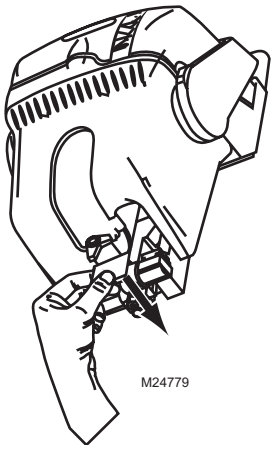


CLEANING AND SEASONAL OR VACATION MAINTENANCE

2. Turn the manual shut-off valve at the bottom of the tank to the “Unlock” position.

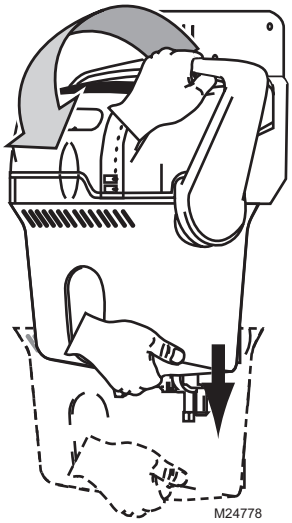


3. Grip the white water valve arm and slide it back within the bracket to disengage from the tank.

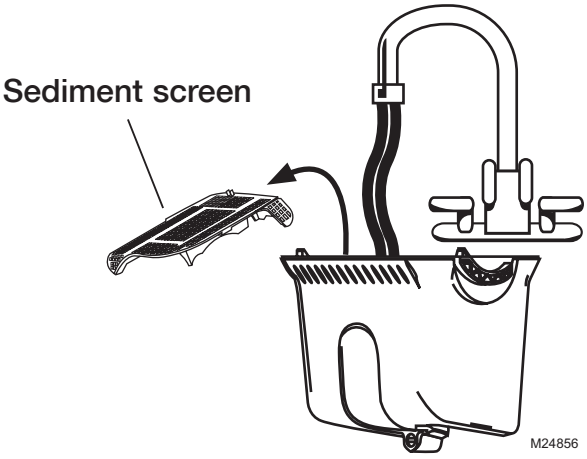


4. Firmly grip the tank bottom. Push down the cover's safety button and pull the latch forward to release the tank.

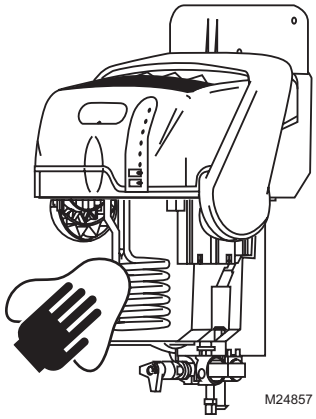
Note: Latch does not come off humidifier with tank.



5. Use tap water to flush loose minerals from the tank. Sediment screen at tank's bottom is removable. For a more thorough cleaning, soak tank in warm, soapy water, then rinse clean. Tank is also dishwasher-safe.



6. Carefully rub minerals off of the heating element, reservoir walls, and sensors. Scouring pads suitable for non-stick pots or pans are suitable for cleaning the humidifier reservoir walls and components within the tank.

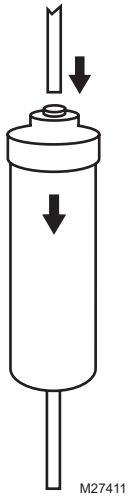


CLEANING AND SEASONAL OR VACATION MAINTENANCE

7. Replace inline filter once per year. Turn water supply off before replacing.

Press down filter collar ring and pull out 1/4 in. water line from each side.

Insert 1/4 in. lines into new filter. Apply modest pressure to ensure a tight fit.



Once clean, reattach tank by securing the latch. Engage the water valve to the cam shaft, and "Lock" the shut-off valve. The "Press Reset" light will blink at start-up. Push the RESET button to ready the humidifier.

Automatic End of Season Shutdown

Your humidifier has the built-in intelligence to shut down when humidity is not needed for an extended period. After 48 hours of inactivity, the humidifier will drain and remain empty until humidity is needed again. This prevents water from stagnating within the tank. The tank will refill with water upon next humidity call.

There are a few house-cleaning steps to follow to keep your humidifier operating at peak efficiency:

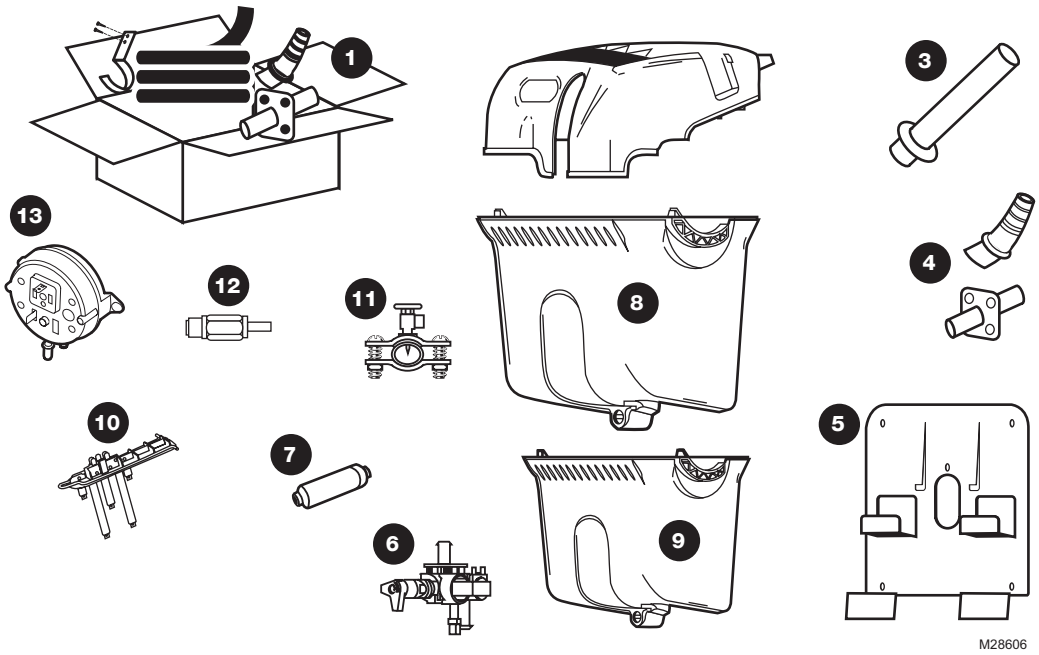
1. Follow steps 1–6 in the Cleaning section on pages 23–24 at least once per year, or when the "Press Empty" light is blinking.
2. Clear ventilation holes in the humidifier's cover.
3. Clear the water drain tube.
4. Make sure the water tank gasket seal is not cracked or split before reattaching the humidifier water tank.
5. Check that the humidifier is still mounted level.

Extended Vacation

When you leave on extended vacations, it is recommended you turn off the humidifier's water supply and turn off the humidity control. When you return, turn on the humidifier water supply and reset your humidity control to a comfortable position.

PARTS LIST

Part	Part Number	Fig. Reference
10-foot Remote Hose and Nozzle Kit	50024917-001	1
20-foot Remote Hose and Nozzle Kit	50024917-002	1
Duct Nozzle	50028003-001	3
Remote Nozzles	50028001-001	4
Mounting Bracket	50020012-001	5
Solenoid Valve	50027997-001	6
In-Line Water Filter	50028044-001	7
RXIH-AS12A/RXIH-AS09A Water Tank	50033181-001	8
RXIH-AS06A Water Tank	50033182-001	9
Water Level Sensor Assembly	50027998-001	10
Saddle Valve	32001616-001	11
Back-flow Water Valve	50030142-001	12
Differential Pressure Switch	50027910-001	13



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Warranty Information

5 years from date of purchase (contact the Rheem Parts Distribution Center for more information).

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes.

RHEEM
AIR CONDITIONING
DIVISION

5600 Old Greenwood Road, Fort Smith, Arkansas 72908

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